

Title (en)

CONTROL SYSTEM FOR SECONDARY BATTERY AND METHOD FOR CONTROLLING SECONDARY BATTERY

Title (de)

STEUERSYSTEM FÜR SEKUNDÄRBATTERIE, ELEKTROFAHRZEUG MIT DEM STEUERSYSTEM UND STEUERVERFAHREN FÜR SEKUNDÄRBATTERIE

Title (fr)

SYSTÈME DE COMMANDE DE BATTERIE SECONDAIRE, VÉHICULE ÉLECTRIQUE INTÉGRANT LE SYSTÈME DE COMMANDE ET PROCÉDÉ DE COMMANDE DE BATTERIE SECONDAIRE

Publication

EP 2204872 A1 20100707 (EN)

Application

EP 08840481 A 20080925

Priority

- JP 2008067235 W 20080925
- JP 2007267989 A 20071015

Abstract (en)

During use of a secondary battery, a concentration change ratio estimating unit (210) estimates a ratio of change (#B) in electrolytic solution concentration based on a charging/discharging current (Ib). According to the estimated ratio of change (#B), a concentration estimated value calculating unit (230) sequentially calculates an electrolytic solution concentration estimated value (B#) during the use of the secondary battery. Based on the estimated electrolytic solution concentration estimated value (B#), a determining unit (250) determines whether or not the electrolytic solution concentration is within a normal range. When the electrolytic solution concentration is outside the normal range, a charging/discharging condition modifying unit (260) modifies a charging/discharging condition of the secondary battery to bring the electrolytic solution concentration back to the normal range, thus avoiding a tendency of overcharge or a tendency of overdischarge.

IPC 8 full level

H01M 10/44 (2006.01); **B60L 11/18** (2006.01); **B60L 50/16** (2019.01); **H01M 10/48** (2006.01); **H02J 7/00** (2006.01); **G01R 31/36** (2006.01); **H01M 10/0525** (2010.01)

CPC (source: EP US)

B60L 58/10 (2019.01 - EP US); **B60L 58/15** (2019.01 - EP US); **H01M 10/484** (2013.01 - EP US); **H02J 7/007188** (2020.01 - EP US); **G01R 31/396** (2018.12 - EP US); **H01M 10/0525** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US)

Cited by

DE112011105675B4; JP2015207473A; CN106233527A; EP2899844A4; US9929581B2; US10594003B2; WO2015162525A1; WO2015097516A1; WO2015155582A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2204872 A1 20100707; **EP 2204872 A4 20110727**; **EP 2204872 B1 20150909**; CN 101828296 A 20100908; CN 101828296 B 20130313; JP 2009100513 A 20090507; JP 5210591 B2 20130612; US 2010204861 A1 20100812; US 8229614 B2 20120724; WO 2009050989 A1 20090423

DOCDB simple family (application)

EP 08840481 A 20080925; CN 200880111692 A 20080925; JP 2007267989 A 20071015; JP 2008067235 W 20080925; US 67865908 A 20080925